Message

From: Nessley, Libby [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=278029DDCAB649398ECB2EBC7DB22A30-NESSLEY, LA]

Sent: 1/29/2020 2:02:12 PM

To: Linak, Bill [Linak.Bill@epa.gov]; Wickersham, Lindsay [wickersham.lindsay@epa.gov]

Subject: RE: Updated String Reactor QAPP

Attachments: 0032451-QP-1-0_String Reactor_QAPP_FINAL.docx; 0032451-QP-1-0_String Reactor_QAPP_FINAL.pdf

Bill/Lindsay,

Here is a word and pdf version of the final QAPP-pdf signed by QA. You will get a QA Track approval form in a separate e-mail. Please circulate the pdf version to Rebecca and Lara for signature and return fully signed version to QA for records. Let me know if you have any questions or concerns.

Great job! Libby

From: Linak, Bill <Linak.Bill@epa.gov>

Sent: Wednesday, January 29, 2020 7:10 AM

To: Wickersham, Lindsay <wickersham.lindsay@epa.gov>; Nessley, Libby <Nessley.Libby@epa.gov>

Subject: RE: Updated String Reactor QAPP

Lindsay:

Yes, that is a good approach. We may well see re-vaporization of PFAS that have condensed on the quartz surfaces. It would be nice to characterize this behavior.

Bill

From: Wickersham, Lindsay <wickersham.lindsay@epa.gov>

Sent: Tuesday, January 28, 2020 4:43 PM

To: Linak, Bill <<u>Linak.Bill@epa.gov</u>>; Nessley, Libby <<u>Nessley.Libby@epa.gov</u>>

Subject: RE: Updated String Reactor QAPP

Hi Libby and Bill,

The QAPP looks great! Thank you both for all of your hard work.

I went through and addressed the question regarding sampling blanks. Libby had the right idea in regards to this blank. These blanks would be used to determine the "background" of the string reactor before each experiment starts. It will simulate all other experimental conditions except the string will **not** be dipped in dispersion. We should let the furnace come to temperature before the sample is taken. This way we can determine if what we are seeing is coming from the dispersion or from past experiments.

Theran and Ariel took sampling blanks of the Calcium hydroxide to test the background of it at different temperatures before they started their tube furnace work. There are also other analytical specific blanks they use but this is listed in their SOPs.

I think this version of a "sampling blank" is a good starting point that we can adjust later on or by sampling method if we come across a better way to accomplish this goal. What do you guys think?

Thanks,

Lindsay

From: Linak, Bill < <u>Linak.Bill@epa.gov</u>>
Sent: Tuesday, January 28, 2020 3:13 PM

To: Nessley, Libby < Nessley, Libby@epa.gov>; Wickersham, Lindsay < wickersham.lindsay@epa.gov>

Subject: RE: Updated String Reactor QAPP

I forgot something.

Bill

From: Linak, Bill

Sent: Tuesday, January 28, 2020 3:13 PM

To: Nessley, Libby <nessley.libby@epa.gov>; Wickersham, Lindsay <wickersham.lindsay@epa.gov>

Subject: RE: Updated String Reactor QAPP

Lindsay:

I added responses/comments to Libby's. Think about the her blank question. Different analysis have different approaches to blanks. How does Theran use blank measurements? Are they the same as Ariel?

Bill

From: Nessley, Libby < Nessley.Libby@epa.gov > Sent: Tuesday, January 28, 2020 2:37 PM

To: Wickersham, Lindsay <wickersham.lindsay@epa.gov>

Cc: Linak, Bill < Linak, Bill@epa.gov>

Subject: RE: Updated String Reactor QAPP

I think we are just about there-I accepted all your changes, made some edits, and there are just a couple more comments. What is contractor role? Will Josh be doing anything where he needs to follow the QAPP or are they primary helping with construct? Just trying to determine if the Jacobs QAO needs to review/approve. Let me know if you have any questions regarding edits/comments. I consider this "approved with minor revisions" so I will generate the QA review approval form. If we need to chat about anything left here to wrap up, let me know. Great job addressing initial review concerns \bigcirc

Thanks,

Libby

From: Wickersham, Lindsay <wickersham.lindsay@epa.gov>

Sent: Monday, January 27, 2020 10:23 AM **To:** Nessley, Libby Nessley.Libby@epa.gov

Cc: Linak, Bill <<u>Linak.Bill@epa.gov</u>>
Subject: Updated String Reactor QAPP

Hi Libby,

I have attached an updated version of the QAPP addressing the issues we discussed at our meeting last week. I kept track changes on so you can see what Bill and I have updated. Let us know if there is anything else that you would like clarification on or if any more edits are needed.

Thank you for all of your hard work and guidance on this.

Best, Lindsay

Lindsay Wickersham

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